



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/612,731

07/01/2003

Paul F. Cote

99118P.30

5776

27804

7590

10/19/2004

HOLLAND & BONZAGNI, P.C.
171 DWIGHT ROAD, SUITE 302
LONGMEADOW, MA 01106-1700

EXAMINER

LEE, BENJAMIN C

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/612,731	Applicant(s) COTE ET AL.	
	Examiner Benjamin C. Lee	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22, 26-36, 50-52, 56, 57, 60 and 61 is/are allowed.
- 6) ☒ Claim(s) 23-25, 37-49, 53-55, 58, 59 and 62-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2632

DETAILED ACTION

Reissue Applications

1. Applicant is reminded that the original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Status

2. Claims 1-65 are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Harbaugh (US pat. #5,535,871).

11) In considering claim 23:

Harbaugh discloses the claimed metallic security device for use with an item (104), said device comprising: a carrier substrate (112); and a plurality of conductive regions (128) disposed on said carrier substrate, wherein said conductive regions are separated by non-conductive regions (124, 116) and have at least two different predetermined lengths forming a predetermined pattern for representing encoded data (Fig. 3), and wherein said predetermined lengths of said conductive regions are detectable to read said predetermined pattern and decode said data (col. 7, lines 44-50).

Art Unit: 2632

2) In considering claim 24, Harbaugh met all of the claimed subject matter as in claim 23, including:

--the claimed wherein said conductive regions include first and second predetermined lengths representing binary integers (0s and 1s), and wherein said predetermined pattern of said first and second lengths of said conductive regions encodes said data in a binary coded format (col. 23, lines 30-51).

3) In considering claim 25, Harbaugh met all of the claimed subject matter as in claim 23, including:

--the claimed wherein said non-conductive regions (116) are formed as graphic indicia and said conductive regions are formed around said graphic indicia (Figs. 3-4 and col. 7, lines 15-35, wherein the alphanumeric characters in the form of humanly perceptible negative images/indicia constitute the claimed graphic indicia.)

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

Art Unit: 2632

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 47-49, 53-55, 58-59 and 62-63 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaule et al. (US pat. #5,803,503).

1) In considering claims 47 & 49:

Kaule et al. discloses the claimed magnetic/metallic security device for use with an item to provide multiple security features (col. 2, lines 23-31), comprising: a carrier substrate (10 of Fig. 6), a metallic layer (11 of Fig. 6) disposed on at least a portion of said carrier substrate (Fig. 6) for providing metallic security features (col. 2, lines 23-31); and a magnetic region (4 of Fig. 6) disposed on and in substantially identical registration with said metallic layer, for providing magnetic security features (col. 2, lines 16-31), wherein said magnetic layer and said metal layer together form visually identifiable magnetic/metal graphic indicia on said at least a portion of said carrier substrate (Figs. 4 & 6 whereby the visually identifiable magnetic/metal graphic indicia are in the form of alphabet depictions formed by the magnetic/metal layers).

2) In considering claim 48, Kaule et al. met all of the claimed subject matter as in claim 47, whereby:

Since the magnetic/metal graphic indicia of Kaule et al. are able to be read or capable of being read by MICR detectors, the indicia are readable by MICR detectors.

2) In considering claim 53, Kaule et al. met all of the claimed subject matter as in the consideration of claim 47 and Figs. 4 & 6.

3) In considering claim 54, Kaule et al. met all of the claimed subject matter as in the consideration of claim 49 (note that claim 54 comprises 2 portions separated by “an/or” requiring

Art Unit: 2632

a rejection to meet only one of the 2 portions, whereby the current claim rejection meets the first of the 2 portions).

4) In considering claim 55, Kaule et al. met all of the claimed subject matter as in the consideration of claim 49, including:

--the claimed said visually identifiable magnetic/metal graphic indicia are in the form of discrete, non-connected, graphic indicia on said at least a portion of said carrier substrate (Figs. 4 & 6 whereby each alphabet depiction are discrete and non-connected relative to each other, i.e. the alphabet graphics are not touching each other).

5) In considering claim 58, Kaule et al. met all of the claimed subject matter as in the consideration of claim 49 (note that claim 58 comprises 2 portions separated by “an/or” requiring a rejection to meet only one of the 2 portions, whereby the current claim rejection meets the first of the 2 portions).

6) In considering claim 59, Kaule et al. met all of the claimed subject matter as in claim 58, including:

--the claimed coating layer (20 of Fig. 6) disposed over said magnetic layer.

7) In considering claim 62, Kaule et al. met all of the claimed subject matter as in the consideration of claim 54 or 58 (note that claim 62 comprises 2 portions separated by “an/or” requiring a rejection to meet only one of the 2 portions, whereby the current claim rejection meets the first of the 2 portions).

8) In considering claim 63, Kaule et al. met all of the claimed subject matter as in claim 62, including:

--the claimed coating layer (20 of Fig. 6) disposed over said magnetic layer.

Art Unit: 2632

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 37-42 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule et al.

1) In considering claim 37:

Kaule et al. discloses the claimed method of authenticating a magnetic/metallic security device including at least one magnetic region having at least one predetermined magnetic characteristic (region 4; col. 2, lines 16-31) and at least one metallic region having at least one predetermined metallic characteristic (region 4; col. 2, lines 23-31), whereby it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to implement the test/detection criteria for document authentication of Kaule et al. using the steps of: "charging said magnetic region; detecting said predetermined magnetic characteristic of said charged magnetic region; detecting said at least one predetermined metallic characteristic of said at least one predetermined metallic characteristic of said at least one metallic region; and comparing said at least one predetermined magnetic characteristic and said at least one predetermined metallic characteristic to expected magnetic and metallic characteristics" according to the disclosure of col. 2, lines 23-29 for the detection and confirmation of electric conductivity properties of the metallic regions and col. 2, lines 16-20 for the magnetic permeability, magnetization, remanence, etc. characteristics of the magnetic regions as they are well known and conventional in the art.

Art Unit: 2632

2) Regarding claims 38-39, Kaule et al. render all of the claimed subject matter obvious as in claim 37, wherein:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include in said magnetic characteristic detection a magnetic level selected from a high, a low, and a medium magnetic level for the encoding using the “magnetization” aspect of the magnetic regions (col. 2, lines 16-20) in a method such as taught by Kaule et al.

3) Regarding claim 40, Kaule et al. render all of the claimed subject matter obvious as in claim 37, wherein:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include in said magnetic characteristic detection a rate of decay of said charged magnetic region using the “permeability” or “remanence” aspect of the magnetic regions (col. 2, lines 16-20) in a method such as taught by Kaule et al.

4) Regarding claims 41-42, Kaule et al. render all of the claimed subject matter obvious as in claim 37, wherein:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include the step of determining and ensuring the presence of said magnetic region and said metallic region on the magnetic/metallic security device of a multi-detection system such as taught by Kaule et al. before detection of the magnetic and metallic characteristics, which includes the step of charging said magnetic region for detecting/authenticating its particular magnetic characteristics, so that detection can be selectively proceeded without undue and unnecessary activation of the detection means for power and processing conservation benefits.

Art Unit: 2632

5) Regarding claim 46, Kaule et al. render all of the claimed subject matter obvious as in claim 37, including:

--the claimed wherein said metallic characteristic includes a length of said metallic region (since metallic region 4 of the figures has a length, and the length of the metallic regions is one determinant of the detectable metallic characteristics such as impedance and conductivity).

9. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule et al. in view of Tooth (US pat. #4,183,989)

1) Regarding claims 43-45, Kaule et al. render all of the claimed subject matter obvious as in claim 37, while:

Tooth specifies using hard magnetic materials region for recording data (authenticating coded variations) thereon and reading such data as a security feature on security papers (Abstract and col. 5, lines 25-45, whereby high coercivity of the magnetic material makes it a hard magnetic material).

In view of the teachings by Kaule et al. and Tooth, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use hard magnetic materials regions for recording data such as taught by Tooth as the magnetic regions of a security document of Kaule et al. in order to provide enhanced security by virtue of the recorded data.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to record said data on said magnetic regions in a security document such as taught by Kaule et al. and Tooth in either analog or digital form as known in the magnetic data recording art.

Art Unit: 2632

10. Claims 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harbaugh in view of Kaule et al.

1) In considering claim 64:

Harbaugh discloses the claimed multiple security features security device for use with an item (104), said device comprising: a carrier substrate (112) having a width; a metal security feature comprising a metallic layer disposed on at least a portion of said carrier substrate, said metallic layer forming a plurality of conductive regions (128) on said carrier substrate, said conductive regions are separated by non-conductive regions (124) which extend entirely across said width of said carrier substrate, each conductive region of said metallic layer including at least one predetermined characteristic that is detectable such that said metallic layer provides metallic security features (coded patterns of Fig. 3 and col. 7, lines 15-50), said metallic layer further including visually identifiable graphic indicia (metallic regions forming negative writing 116 of Fig. 3);

While Kaule et al. teaches the use of detectable magnetic security feature in a multiple-security features security document in combination with metallic layer (11, 3 of Fig. 6 and col. 2, lines 23-31) and graphic indicia (Fig. 4) to enhance security, comprising a magnetic layer (4 of Fig. 6) including at least one type of magnetic substance having at least one predetermined magnetic characteristic such that said magnetic layer provides magnetic security features (col. 2, lines 10-40), wherein said magnetic layer is disposed on at least some of the metallic layer (Fig. 6).

In view of the teachings by Harbaugh and Kaule et al., in order to further the objective of providing multiple security features in a security document such as taught by Harbaugh to further

Art Unit: 2632

enhance security, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include a magnetic security feature having the detectable magnetic layer such as taught by Kaule et al. in the security document of Kaule et al.

2) In considering claim 65, Harbaugh and Kaule et al. made obvious all of the claimed subject matter as in claim 64, including:

--the claimed coating layer (20 of Fig. 6 of Kaule et al.) disposed over said magnetic layer.

Allowable Subject Matter

11. Claims 1-22, 26-36, 50-52, 56-57 and 60-61 are allowed.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) GB 2221425A

--A known security document using magnetic recording.

2) EU 0330733A1

--A similar security document.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963.

The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Benjamin C. Lee
Primary Examiner
Art Unit 2632

B.L.